APPENDIX V

RESPONSIVENESS SUMMARY

RESPONSIVENESS SUMMARY
FOR THE
RECORD OF DECISION
RIVERSIDE INDUSTRIAL PARK SUPERFUND SITE
NEWARK, NEW JERSEY

INTRODUCTION

As required by the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) at 40 C.F.R. 300.430(f)(3)(i)(F), this Responsiveness Summary provides a summary of the significant comments and concerns submitted by the public regarding the Proposed Plan for the Riverside Industrial Park Superfund Site (Site), and the U.S. Environmental Protection Agency's (EPA's) responses to those comments and concerns. All comments summarized in this document have been considered in EPA's final decision for selection of the remedy for the Site.

This Responsiveness Summary is divided into the following sections:

I. SUMMARY OF COMMUNITY RELATION ACTIVITIES: This section provides the history of community involvement and concerns regarding the Site.

II. SUMMARY OF SIGNIFICANT COMMENTS, CRITICISMS, AND NEW RELEVANT INFORMATION, AND EPA's RESPONSES: This section includes summaries of oral comments received by EPA at the August 5, 2020 public meeting, EPA's responses to these comments, as well as responses to written comments received during the public comment period.

The Responsiveness Summary includes attachments which document public participation in the remedy selection process for the Site. The attachments are as follows:

- Attachment A – July 2020 Proposed Plan for the Riverside Industrial Park Superfund Site;
- Attachment B – Public Notice and comment period extension notices published in Newark Star Ledger and El Diario;
- Attachment C – Transcript of the August 5, 2020 Public Meeting;
- Attachment D – Written comments received by EPA during the comment period.

SUMMARY OF COMMUNITY RELATIONS ACTIVITIES

On April 27, 2016, EPA held a public meeting under the Newark Superfund "Making a Visible Difference" initiative. This meeting provided information related to four federal Superfund sites located in the City of Newark (including the Site) and solicited feedback about the community's concerns, as well as suggestions for communication methods and community engagement. On July 6, 2017, EPA visited residences along Chester Avenue, between Riverside Avenue and Hinsdale Place, and distributed the Site fact sheet to the occupants prior to the start of field activities for the remedial investigation (RI). The fact sheet provided information on the Site background and an update on Site investigation activities. EPA subsequently held monthly telephone calls with the

City of Newark to provide technical and legal updates during RI activities. Field investigations were conducted at the Site from 2017 through 2019, which culminated in the completion of remedial investigation and feasibility study (RI/FS)[1] reports in April and July 2020, respectively. Throughout this period, EPA provided progress updates and presented findings to the Passaic River Community Advisory Group (CAG). The CAG consists of stakeholders who represent a broad range of interests and locales potentially affected by the contamination and cleanup of the Diamond Alkali Superfund Site, including the Lower Passaic River Study Area. Since the Site is adjacent to the Passaic River, the investigation and cleanup of the Site were of interest to the CAG. Presentations given to the CAG were also posted to its website at www.ourpassaic.org.

As part of EPA's public outreach efforts, a Community Involvement Plan (CIP) was developed and made available to the public in July 2020. The CIP was developed to facilitate communication between EPA and the communities affected by and interested in the Site, as well as to encourage community involvement. In May 2020, EPA and its consultant contacted approximately 20 stakeholders who may be affected, or perceive they are affected, by the Site. The interviewees represented a broad spectrum of the community from a diverse group of categories and included local residents, organizations, churches and clergy, activists, groups working with immigrants, elected officials, and cultural, historic, and civic associations. The process was considerably impacted by the coronavirus disease (COVID-19), and it was exceptionally difficult to find stakeholders who were able to participate in the interview process due to office closures and other significant issues. Nevertheless, ten individuals were interviewed, with interviews taking approximately 45 minutes to one hour, depending on the interests, concerns, activities, and level of input provided by the individual interviewees. Information from the interviews was analyzed and incorporated into the CIP which generally included the local community's environmental concerns, concerns related to the Site, and communication preferences.

EPA's preferred remedial alternative and the basis for that preference were identified in a Proposed Plan.[2] The Administrative Record that is the basis for EPA's identification of a preferred alternative, including the RI and FS reports, was available to the public on July 22, 2020, when the Proposed Plan was released to the public for comment. These documents were made available to the public at information repositories maintained at the EPA-Region 2 Superfund Records Center, 290 Broadway, 18th Floor, New York, New York, 10007-1866 and on EPA's website for the Site at www.epa.gov/superfund/riverside-industrial. At the August 5, 2020 public meeting, EPA staff presented to the public EPA's preferred remedial action alternatives to address various wastes found across the Site, contaminated sewer water, soil gas, soil/fill, and groundwater.

A notice of availability for the above-referenced documents was published in the Star Ledger and in El Diario[3] on July 22, 2020. The public comment period initially ran from July 22, 2020 to August 21, 2020 but several extensions were granted, and the public comment period officially ended on February 19, 2021. Notice of the comment period extensions was published on August

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[1] An RI determines the nature and extent of the contamination at a site and evaluates the associated human health and ecological risks. A FS identifies and evaluates remedial alternatives to address the contamination.

[2] A proposed plan describes the remedial alternatives considered for a site and identifies the preferred alternative and the rationale for this preference.

[3] El Diario is the largest Spanish-language daily in the United States. The notice was translated to Spanish for this publication.

17, 2020, September 21, 2020, October 19, 2020, November 17, 2020, December 18, 2020, and January 18, 2021 in the Star Ledger and El Diario newspapers. Announcements of comment period extensions were also posted on EPA's website. On August 5, 2020, EPA held a virtual public meeting to inform local officials and members of the community about the Superfund process, present the Proposed Plan for the Site, including the preferred remedy, and respond to questions and comments from approximately 30 attendees (including residents, media, local business people and local government officials). Based upon the comments received during the public comment period, the public generally supports the preferred alternatives.

SUMMARY OF SIGNIFICANT COMMENTS, CRITICISMS, AND NEW RELEVANT INFORMATION, AND EPA's RESPONSES

Comments were received at the public meeting and in writing. The transcript from the public meeting can be found in Appendix V-C and written comments received can be found in Appendix V-D. A summary of the comments provided at the public meeting and in writing, as well as EPA's responses to those comments, are provided below.

A. Compliance with CERCLA and NCP, EPA Policies and Guidance

1. Comment: A commenter stated that the Proposed Remedial Action Plan (Proposed Plan) is inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) because the EPA did not adequately consider all relevant Site data. The commenter argued that, as a result, the Proposed Plan was arbitrary and capricious, and not in accordance with law.

   Response: EPA disagrees that the Proposed Plan did not adequately consider the relevant Site data or is inconsistent with the NCP.

   By letter dated July 30, 2020 from PPG Industries, Inc. (PPG) to EPA, PPG disputed EPA's decision to complete the FS. EPA's Statement of Position (dated September 4, 2020) countered that the completion of the FS Report (dated July 2020) was procedurally consistent with the Administrative Settlement Agreement and Order on Consent (ASAOC) and was not arbitrary and capricious. The Director of EPA Region 2's Superfund and Emergency Management Division, who was designated by the ASAOC to issue a determination in the dispute, concluded in his February 2, 2021, decision (p. 1) that "…while the clarity of the Region's communication with PPG could have been greater, I do not find the process the Region used to modify the FS Report to be arbitrary and capricious." Moreover, the Director concluded that "…the record supports the modifications made by the Region to the FS Report and that the Region's CSM is sufficiently supported by the data and technical findings of the record (p. 2)." The record of the dispute resolution proceeding invoked by PPG is included in the administrative record for the Site.

The Remedial Investigation (RI) Report, which was prepared by PPG under the ASAOC with EPA oversight, and the draft final FS Report were conducted in accordance with the NCP, which requires the collection of "data necessary to adequately characterize the site for the purpose of developing and evaluating effective remedial alternatives." 40 CFR 300.430(d)(1). *See also* the responses to comments in Section C (Conceptual Site Model) that include additional discussions of data considered by EPA in developing the Proposed Plan.

2. Comment: A commenter stated that EPA's retroactive extension of the public comment period on January 25, 2021, is inconsistent with the NCP, and claims that EPA intentionally manipulated the comment deadline to obtain the commenter's comments before the comment period expired on February 19, 2021.

   Response: The public comment period for the Proposed Plan was consistent with the NCP. The NCP, at 40 CFR §300.430(f)(3)(i)(C), specifies that the Agency shall:

   > provide a reasonable opportunity, not less than 30 calendar days, for submission of written and oral comments on the proposed plan and the supporting analysis and information located in the information repository, including the RI/FS. Upon timely request, the lead agency will extend the public comment period by a minimum of 30 additional days.

   EPA provided an initial 30-day public comment period from July 22, 2020 to August 21, 2020, after which EPA granted several extensions, with the public comment ending on February 19, 2021. By the time EPA extended the comment period on January 25, 2021, EPA had already provided significantly longer than the 60 days required by the NCP. EPA did not, however, retroactively extend the comment period. EPA published notice of the extension on January 18, 2021, which was prior to the expiration of the comment period. EPA also notes that the NCP does not prohibit a retroactive extension of a comment period that was already extended well beyond the required time period. There is no basis for commenter's statement that EPA manipulated the extension of the comment period.

3. Comment: A commenter stated that the administrative record was not complete because, as of the closing date of the public comment period, EPA had not completed its response to a Freedom of Information Act (FOIA) for information that the commenter asserts was necessary to evaluate the Proposed Plan. The commenter accuses of EPA of intentionally not completing its response to the FOIA request to prevent the commenter from incorporating requested records into its Proposed Plan comments, and states that EPA's "lack of a timely substantive response to PPG's FOIA request" indicates that the agency "has been backfilling the administrative record" file to support a "pre-selected" remedy.

Response: EPA established an administrative record file containing the documents and other information that formed the basis for the Proposed Plan. The administrative record was made available to the public when the Proposed Plan was released on July 22, 2020, with records from the dispute resolution proceeding added as they were issued during the public comment period, providing sufficient time for the public to review the records in the administrative record file before the close of public comment period. The commenter erroneously states that it must receive and review EPA's response to its FOIA request (for records leading up to the completion of the draft final FS Report and the release of the Proposed Plan) to evaluate the Proposed Plan. EPA compiled the administrative record file in accordance with the NCP's requirements for the contents of administrative records at 40 C.F.R. § 300.810, and the administrative record file therefore contained the required information for the public to submit comments. EPA's response to the FOIA request is unrelated to the public comment period for the Proposed Plan. The commenter's unsubstantiated claims that EPA intentionally delayed completion of the FOIA response during the comment period and that EPA "has been backfilling" the administrative record file are without basis.

B. Remedy

1. Comment: Several commenters expressed support for EPA's preferred alternatives.

   Response: EPA acknowledges the comments in support of the preferred alternatives.

C. Conceptual Site Model

1. Comment: A commenter stated that EPA's Conceptual Site Model (CSM) is flawed. The commenter indicated that the Proposed Plan is based on the assumption of a "top down" CSM, which ignores information presented in the RI. The commenter stated that EPA's CSM does not consider the historic fill as the primary, if not sole, source of lead in groundwater. The commenter stated that EPA's CSM is based on the assumption that historical releases from Site operations contaminated the soil, which in turn migrated to groundwater. The commenter indicated that the impervious surfaces of the Site would have prevented any spills or releases from Site activities from impacting the soil, and any lead that might have reached the soil is likely to be immobile. The commenter also argues that the 'hinged flappers' spaced along the base of the exterior walls in certain buildings were components of standard fire water management systems and were not for the discharge of waste. The commenter believes that historic fill is the source of lead in groundwater, and not the historical spills and/or releases of paint and other materials containing lead that are the basis of EPA's CSM.

   Response: EPA's CSM is consistent with the data presented in the RI Report (April 2020). Both the Site data and evidence about historical Site operations support the

Region's determination that former lead paint manufacturing operations at the Site contributed the predominant source of lead contamination to the soil and groundwater. From approximately 1902 to 1971, the Site was used for paint, varnish, linseed oil, and resin manufacturing by Patton Paint Company ("Patton"), which merged into the Paint and Varnish Division of Pittsburgh Plate Glass Company in 1920. Pittsburgh Plate Glass Company changed its name to PPG Industries, Inc. in 1968. PPG conveyed its interest in the Site in 1971. The RI Report (April 2020) states on page 1-3 that "Pigments would have been brought to the Site and used in the manufacture of paints. These were often metallic chemicals and would have included compounds of cadmium, chromium, lead, titanium, and zinc. Basic lead carbonate (white lead) would have been one of the pigments used as a raw material." This statement is consistent with the following two historical references to the use of basic lead carbonate on the Site, which are part of the record of the dispute resolution proceeding, included in the administrative record for the Site:

- A historical brochure for Patton, PPG's corporate predecessor, Sun-Proof Paints, printed circa 1897 states that "The composition of Patton's White is printed on every can, and is strictly pure white lead and zinc oxide, both doubly ground in strictly pure linseed oil to impalpable fineness, with the right amount of silica (Patton's secret)" (Exhibit 5 to EPA's September 4, 2020 Statement of Position).

- A Patton employee testified about Patton's use of lead carbonate and zinc oxide to the United States Supreme Court in *Heath & Milligan Mfg. Co. v. Worst*, 207 U.S. 338 (1907) on page 190 (Paragraph 323) of the Court's Transcript of Record (refer to Exhibit 6.A for the entire transcript, and Exhibit 6.B for a relevant excerpt of the transcript, EPA's September 4, 2020 Statement of Position).

Historical manufacture of white lead pigment was originally accomplished by corroding sheets or plates of lead (sometimes referred to as lead buckles) by applying heat and moisture, carbon dioxide, and acetic acid vapor. The corrosion product created from the lead sheets was the lead carbonate (or white lead) pigment, which was scraped off and finely ground into a powder. While it is not known if Patton, and later PPG, produced lead pigment at the Site from metallic lead or purchased and conveyed it to the Site as lead carbonate, the large amount of paint known to have been manufactured by Patton at the Site suggests that the company used a large quantity of white lead pigment at the Site in connection with those operations. The amount of white lead pigment that Patton used in the early 1900's can be conservatively estimated based on the volume of documented paint production at the Site. The document "Use of United States Government Specification Paint and Paint Materials" by P.H. Walker and E.F. Hickson (August 1924) contains minimum recommended quantities of components in certain paints (Exhibit 7.A to EPA's September 4, 2020 Statement of Position). Paint formulations based on a combination of white lead and zinc oxide pigments (as used by Patton) are addressed in rows 7-9 of Table 1 below, a 1924 federal government document which recommend 50 pounds (lbs) white lead and 50 lbs of zinc oxide to yield anywhere from 7 to 11 ¾ gallons of paint per batch.

Table 1: 1924 United States Government specifications for mixing components of paint (Exhibit 7.B to EPA's September 4, 2020 Statement of Position).

TABLE 1.—*Mixing formulas using Federal Specifications Board paste pigments, and dry red lead*

Formula number	Paste white lead, Federal Specifications Board Nos. 5 or 6	Paste zinc oxide, Federal Specifications Board Nos. 8 or 9	Dry red lead, Federal Specifications Board No. 11	Paste red lead, Federal Specifications Board No. 11	Paste titanium pigment, Federal Specifications Board No. 115	Raw linseed oil, Federal Specifications Board No. 4	Boiled linseed oil, Federal Specifications Board No. 4	Turpentine, Federal Specifications Board No. 7	Drier, Federal Specifications Board No. 20	Varnish, Federal Specifications Board Nos. 18 or 22	Approximate yield	Used for—
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Gals.*	*Gals.*	*Gals.*	*Pts.*	*Pts.*	*Gals.*	
1	100					3 to 4		2 to 4	1 to 2		7¾ to 11	(1)
2	100						7	1 [2]			10⅔	(1)
3	100					7		1 [2]	3		11	(1)
4	100					1 to 2		1½ to 2 [2]	1		6 to 7	(3)
5	100					3 to 4½		¼ to ½ [2]	1		6½ to 7½	(4)
6	100							1½ to 3	¼ to ½	1 to 6	4¾ to 6½	(6)
7	50	50				3 to 4		2 to 4	3 to 4		8½ to 11¾	(5)
8	50	50				1½ to 2		2 to 3 [2]	4		7¾ to 8¾	(4)
9	50	50				3 to 4		½ to ¾ [2]	2 to 3		7 to 8½	(5)
10			100			3½		½ [2]	2½		5¼	(7)
11				100		3		½ [2]	2½		5¼	(7)
12	60		40			2 to 4		1¾ to 2	1 to 2		6 to 8½	(3)
13	60			40		1¾ to 4		1¾ to 2	1 to 2		6 to 7	(7)
14		40			60	4 to 4½		2 to 4	4 to 5		10¾ to 13½	(5)
14		40			60	2 to 2½		2 to 3 [2]	4		8¾ to 10¼	(4)
16		40			60	4 to 4½		½ to ¾ [2]	4 to 5		9¾ to 10	(5)

[1] For first (priming) coats, wood, new work.
[2] Volatile mineral spirits F. S. B. No. 16 can be used in place of turpentine in this formula.
[3] For first (priming) coats on plaster, concrete, cement, brick, and stone, new work.
[4] For body coats, wood, outside, new, and first coat repainting.
[5] For finish coats, outside.
[6] For finish coats, inside, flat to eggshell gloss.
[7] For first (priming) coats on metal.

NOTE 1.—In nearly all of the above formulas, except for priming coats on new wood, a mixture of one-third to one-half boiled linseed oil and the remainder raw linseed oil may be substituted for the raw oil, omitting the drier.

NOTE 2.—In using the mixing formulas read across the page on the horizontal line; for example, formula No. 9 reads thus:

50 pounds paste white lead,
50 pounds paste zinc oxide,
3 to 4 gallons raw linseed oil,
½ to ¾ gallons turpentine,
2 to 3 pints drier.

7 to 8½ gallons of paint, for finish coats, outside.

Patton's operation at the Site is estimated to have produced about 42,000 gallons[4] of paint per week in the early 1900's (Exhibit 8 to EPA's September 4, 2020 Statement of Position, Argus Ledger, Newark, NJ, December 31, 1902). For a white lead/zinc oxide mixture similar to that specified by the United States government in 1924, and assuming approximately 50 lbs of white lead for approximately every 10 gallons of paint manufactured, the plant would have required 210,000 lbs of white lead pigment per week as a feedstock.

In addition to its use in paint manufacturing, lead was historically added to varnishes as a drying agent. "The Influence of lead Ions on the Drying of Oils" by

[4] 6,000 gallons per day was mentioned by the Argus Ledger article and 42,000 gallons per week was calculatedusing this reference.

Charles Tumosa and Marion Mecklenburg (published by the Smithsonian Center for Materials Research and Education) addresses both lead pigments in paint and the use of "lead compounds or pigments [to] alter the drying behavior and physical properties of oil paints and varnishes." (Exhibit 9 to EPA's September 4, 2020 Statement of Position.) The article indicates that by the late nineteenth to early twentieth century, manufacturers found that a combination of cobalt, manganese, and lead compounds was efficient to cause drying and polymerization in oils. The 1923 PPG publication "Glass, Paints, Varnishes and Brushes, Their History, Manufacture and Use (copyright 1923 Pittsburgh Plate Glass Company)" states that "An extensive variety of varnishes can be made by changing the operations, the gums, the oils, and the driers used … When the gums, oil, and metallic drying salts have been properly combined…" (Exhibit 10.A to EPA's September 4, 2020 Statement of Position, "Paint Section, The Manufacture of Varnish"). Based on this information, it is likely that PPG also added lead to varnishes as a drying agent, as it was common practice within the industry at the time.

During the manufacturing of the paints and varnishes at the Site, lead-containing material contaminated the surface and subsurface soils (including fill material) from accidental spills and discharges, as stated in the RI Report (page 7-1). An article titled "Power Plant in the Patton Paint Co., Newark, N.J." in the October 15, 1903 issue of *The Engineer* (Exhibit 11.A and Exhibit 11.B to EPA's September 4, 2020 Statement of Position) states that there were two motors used to drive lead chasers at the facility, "pieces of apparatus in which white lead, the foundation for all of a certain class of paints, is worked and freed of its contained moisture." Motors at the plant were "housed to protect them from the powdered white lead and dust which is very apt to be floating in the air … A 7-horsepower motor… drives a 7 ½ inch x 4 inch air compressor … used to blow dust out of motor armatures, etc…" Historical Patton/PPG plant housekeeping activities (such as floor cleaning and sweeping) likely released the powdered white lead pigment to surface soil/fill material, specifically since most buildings were constructed with drains and wall slots with hinged flappers at floor level to allow discharge of sweepings/floor washings to outside the building. The photo immediately below, Figure 1 (Exhibit 12 to EPA's September 4, 2020 Statement of Position) shows a floor flapper at Building #7 at the Site. Elevated concentrations of lead (greater than 800 mg/kg) have been detected in soil immediately outside Building #7. Given that the article in *The Engineer* describes the prevalence of white lead dust inside the Patton buildings, EPA reasonably developed a CSM that accounts for the release of lead contamination via disposal of floor sweeping/floor washing waste through the 'hinged flappers' spaced along the base of the exterior walls to the surface soils along the perimeter of the Patton buildings. The commenter argues that the flappers were components of standard fire water management systems and were not for the discharge of waste. The design of the flappers, however, would have permitted floor sweeping/floor washing waste to exit the building.

Figure 1: Photograph of floor flapper on Building #7 (Exhibit 12 to EPA's September 4, 2020 Statement of Position).

A photograph of the Patton facility from the book "Glass, Paints, Varnishes and Brushes, Their History, Manufacture and Use (copyright 1923 Pittsburgh Plate Glass Company)" (Figure 2) depicts Building #9 and Building #6 (looking northeast) on page 24 of its "Paint Section." Building #7A is also shown on the right side of the cited picture; Building #7A would eventually be replaced by the current Building #7. Note that barrels and various materials are stored on the ground in front of the buildings. These buildings border Lot 63/64, where the focused lead removal will occur and Building #7 is on Lot 63. (Note that Lot 63 is one of 15 lots on the Site, and the RI Report includes information regarding Site operations for each lot [RI Report, pages 1-3 through 1-30]).

Figure 2: PPG paint manufacturing plant in City of Newark, New Jersey (Exhibit 10.B to EPA's September 4, 2020 Statement of Position).

The historic use of large quantities of lead in the production of paint at this Site and PPG's documented housekeeping practices support EPA's determination in the CSM that historical Site operations released lead into soil/fill at the Site.

EPA agrees that an impervious surface currently covers portions of the Site and may have existed in the past over some portions of the Site, but does not agree that there is enough evidence in the aerial imagery to conclude that the areas designated by the commenter as "impervious" were in fact impervious. Moreover, the first aerial image used in the commenter's evaluation is dated 1924, and there is no evidence that identifies the ground cover from the start of PPG's operations from 1902 to 1924. In addition, during PPG's operation, buildings were demolished, new buildings were erected, and underground utilities were installed. All of these activities would have resulted in disturbances to the ground cover. There was no engineering control designed to provide site-wide containment of lead or other hazardous substances released during the duration of operations from 1902 to 1971.

2. Comment: A commenter indicated that if EPA's CSM were accurate and the lead in soil and groundwater at the Site resulted from spills and/or releases from historical facility operations, including paint manufacturing, there would be a correlation between lead and other metals found in paint. The commenter argues that the correlation between lead and zinc does not support EPA's assertion that lead in soil/fill is from historical Site operations.

   Response: The historic facility operations support the conclusion that lead and zinc were released into the soil/fill material as a result of paint and varnish plant housekeeping activities, along with incidental releases of white lead and zinc oxide pigments during material storage, handling, and transfer. The likelihood that PPG operations are a source of lead contamination in Site soil also is supported by a positive correlation between lead and zinc in the soil/fill material samples collected during the RI, with a linear regression coefficient of R^2 of 0.72. The highest levels of lead in the RI borings are reported on Lots 63 and 64 and are correlated with the highest levels of zinc (*see* the cluster of green and light brown points on the right side of Figure 3), strongly suggesting that historical facility operations are a primary source of lead and zinc at these locations.

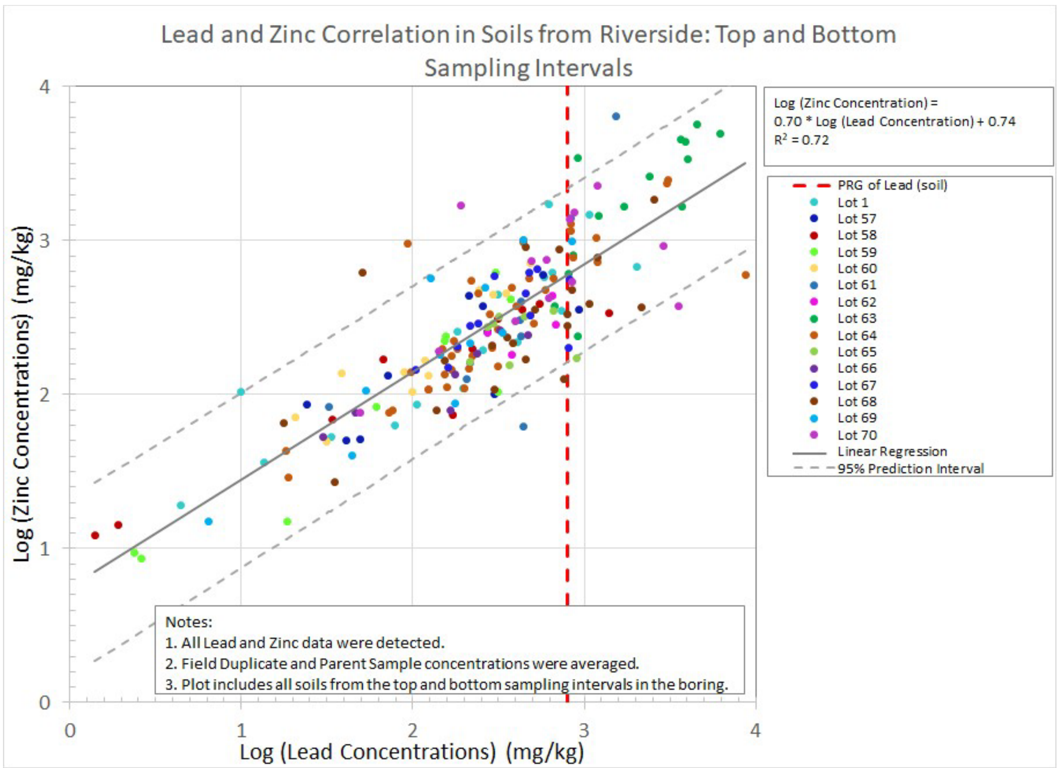

Figure 3: Lead and Zinc Correlation in Soil/Fill Material from Riverside (Exhibit 13 from EPA's September 4, 2020 Statement of Position)

3. Comment: A commenter stated that EPA's CSM is based on lead in soil being the source of lead in groundwater and that for this to be an accurate CSM, the lead in surface soil should correlate to lead in subsurface soil and to lead in groundwater, and the commenter suggests the data do not follow this pattern. The commenter states that the lack of a point-by-point correlation between lead in soil and lead in groundwater undermines EPA's CSM. The commenter also criticized EPA's CSM by presenting an analysis of groundwater data that included grouping the monitoring wells based on locations in the northern portion of the Site, the southern portion of the Site, and the monitoring wells on Lot 63. The commenter concluded from its analysis that the distribution of lead in groundwater is not consistent with EPA's CSM.

   Response: The commenter incorrectly asserts that there is no spatial correlation between lead levels in soil and elevated total lead levels in groundwater. A point-by-point spatial correlation between soil/fill material sample results and groundwater results cannot be undertaken at the Site because of the various groundwater gradients across the Site and lack of co-located samples. Co-located soil/fill material samples and shallow groundwater samples were mainly collected from the temporary well points; however, it was agreed between Region 2 and PPG during the scoping of the remedial investigation field work that these samples would be unvalidated screening samples that would be used only to design the monitoring well network. Consequently, no single soil sample can be used to evaluate the presence or absence of total lead exceedances in a co-located groundwater sample. Instead of using a point-by-point analysis, EPA determined that the cluster of soil/fill material exceedances around Building #7 represents the result of lead contamination related to historical PPG activities in that portion of the Site, and the consistent exceedances of total lead in groundwater samples collected from around Building #7 are consistent with the presence of a Site-related source of lead in soils (*see* Figure 4). Other clusters of soil exceedances are observed across the Site, particularly on Lot 70.

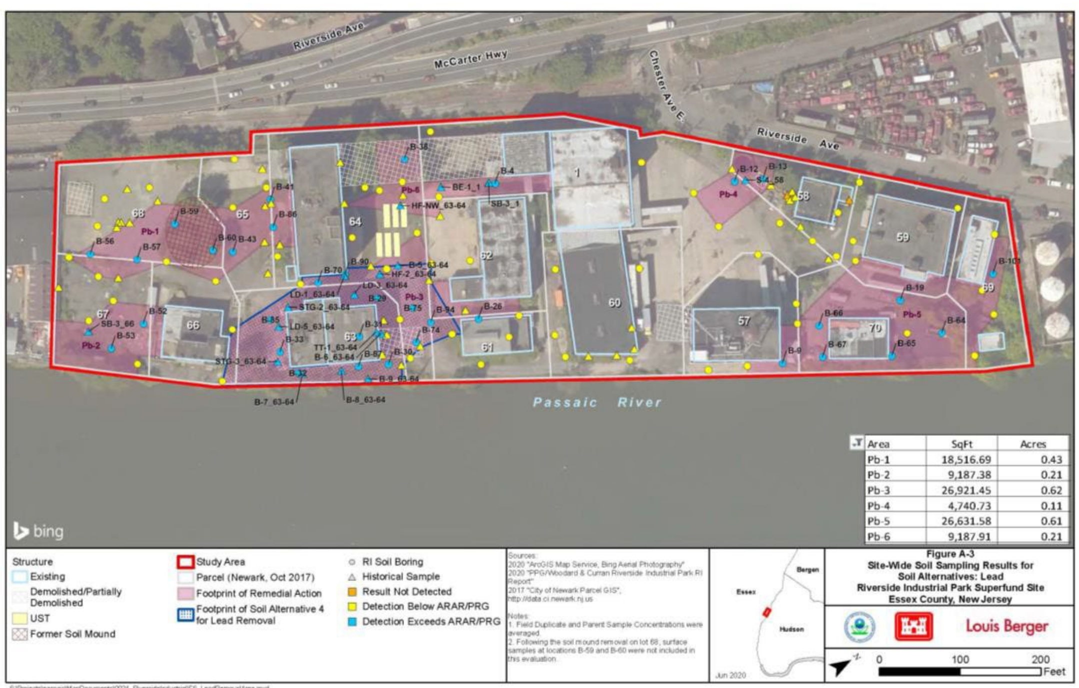

Figure 4: Figure A-3 from FS Report (July 2020) Appendix A showing delineated areas of lead in soil/fill material that exceed the remediation goal (RG) of 800 mg/kg and the footprint of lead removal around Building #7, which is part of EPA's Preferred Alternative for soil/fill material.

Two major technical errors in the commenter's argument are: (1) the commenter inaccurately infers a causal relationship between downgradient soil/fill material and upgradient groundwater samples, and (2) the commenter mischaracterizes the soil/fill material samples and groundwater sample depths. These errors confound any attempt to draw conclusions from the data presentation submitted by the commenter.

The commenter attempted to compare soil/fill material and groundwater samples to demonstrate that elevated lead in soil/fill material could be found near relatively low-level concentrations of total lead in groundwater samples. The commenter assigned soil borings to monitoring wells based on geographical distance without considering the local hydrology. This point-by-point evaluation is flawed because it includes side-gradient and downgradient soil borings that would not impact lead concentrations detected in the nearby side-gradient and upgradient monitoring wells. As stated in the RI Report (April 2020, Section 3.4.1, pages 3-5), the groundwater movement is generally towards the east (towards the Passaic River) with "several local flow patterns that appear during both low and high tide including saddles, mounds, and a local flow direction to the northeast in the vicinity of Lot 58." Table 2 below lists the monitoring wells, the "nearest soil boring" assigned by the commenter, and EPA's comments. Note that soil borings positioned downgradient or side-gradient relative to a monitoring well would not have a significant effect on the groundwater contaminant concentrations. Shallow groundwater gradients are based on the piezometer surface maps presented in RI Figures 2-5 through 2-10.

Table 2: EPA Comments on Shallow Groundwater Gradients
and Soil Boring Locations

Monitoring Well Identified by PPG	"Nearest Soil Locations" Selected by PPG	Comments on Shallow Groundwater Gradients and Soil Boring Locations
E1	B-59 and B- 77	Gradient is south-to-southeast depending on tides. B-77 is **side-gradient** to E-1 during high tide and low tide. B-59 is upgradient (as discussed in text below).
E-4	B-27	Gradient is northeast. B-27 is **side-gradient.**
E6 and E7	B-4	Gradient is north-to-east depending on tides. B-4 is **downgradient** from E-6 during high tide and low tide. B-4 is spatially co-located with E-7.
MW-103	B-53	Gradient is southeast. B-53 is **side-gradient** during high tide and low tide.
MW-105	B-38	Gradient is north. B-38 is spatially co-located with MW- 105; however, lead in the saturated zone is not characterized.
MW-106	B-35, B-36, B-37, and B- 91	MW-106 is located on a groundwater mound. Groundwater gradient is radial.

MW-114	B-12 and B- 13	Gradient is north-to-east depending on tides. B-13 is **downgradient** from MW-114 during high tide and low tide. B-12 is upgradient.
MW-117	B-10 and B-105	Gradient is either north, east, or west depending on tide. B-10 is **side-gradient** or **downgradient**; B-105 is upgradient only under certain tidal conditions.
MW-120	B-61 and B-62	Gradient is either north, east, or west depending on tide. B-61 and B-62 may be upgradient under certain tidal conditions.
MW-122	B-102	Gradient is either northwest, west, or southwest depending on tides. B-102 is **downgradient** during high tide and low tide.
MW-123	B-56 and B-82	Gradient is southeast-to-south depending on tides. B-82 is **side-gradient** and B-56 is **downgradient** during high tide and low tide.

As another example, the commenter attempted to draw a point-by-point comparison between the low-level total lead concentrations detected in well E-1 with two nearby soil borings (B-77 and B-59). In an attempt to disprove a relationship between lead contamination in soils and groundwater, the commenter argues that low-level total lead concentrations in well E-1 were not commensurate with the nearby elevated lead concentrations in the soil/fill material. Only boring B-59 is upgradient of well E-1; however, the commenter's data evaluation[5] comparing boring B-59 and well E-1 contains an error. The commenter plots the groundwater samples at a depth of approximately 6-7 feet below ground surface (bgs), which is actually the depth to water from the top of the well casing. Groundwater samples were collected at the pump intake, which was approximately 10 feet below top of casing (refer to RI Appendix G).

When the error is corrected, the detected total lead concentrations in E-1 groundwater samples collected at 10 feet below the top of the well casing (maximum total lead concentration of 1.3 ug/L) are commensurate with the one spatially comparable soil/fill material sample collected in the nearby boring B-59, at a depth of 9.0-10.5 feet bgs, with a relatively low-level detected lead concentration of 34.9 mg/kg. The data therefore do not support the commenter's position that low-level total lead concentrations in well E-1 were unrelated to the elevated lead concentrations in the nearby soil/fill material. Note that similar technical errors were found in the remaining figures generated by the commenter.

Further evaluation of the data refutes the commenter's claim that the distribution of lead in the northern portion of the Site, the southern portion of the Site, and the area

[5] *See* Figure 4A in PPG's comment submission dated January 20,2021.

around Lot 63 do not follow the Region's CSM. Once released into the environment, lead-based compounds would be available to mix with the surface soil/fill material and infiltrate into the subsurface and shallow groundwater during precipitation events, potentially causing "top-down" contamination wherever these compounds were released or otherwise present in the environment. As discussed above, there is a substantial amount of lead contamination in the soil/fill around Building #7 on Lot 63 in the southern portion of the Site. While lead contamination in the northern portion of the Site is not as substantial in comparison to the southern portion, the soil/fill material on the northern portion of the Site nevertheless has been impacted from lead contamination, including by operations conducted on Lot 70. The commenter argues that "[The Region] has characterized the northern portion of the Site as an area that 'has not been substantially impacted by lead contamination'" and then draws conclusions about the presence of lead on the remainder of the Site based on conditions found on the northern portion. However, the data do not support the commenter's contention that, based on conditions in the northern portion of the Site, lead in shallow groundwater throughout the Site is attributable to fill material.

As noted in the RI Report, "Historic fill in some areas appears to have been impacted due to historical and/or current operations and chemical/waste handling at the Site. The source of soil contaminants depends on area and contaminants and are likely due to historic fill, past/current operations (spills/releases), and illegal disposal" (RI Report, page ES-2). Consistent with this statement, in the northern portion of the Site, there are some areas that have not been as significantly impacted by lead contamination, while other areas on the northern portion of the Site have been impacted by placement of historic fill material and by both past and current operations, including operations conducted on Lot 70. For example, one area in the northern portion of the Site that has not been as substantially impacted by placement of historic fill material containing lead is in the northwest corner. As stated in the RI Report:

> Fill material is documented at the surface throughout the Site with greater fill thicknesses associated with areas reclaimed from the Passaic River. The majority of the Site (except the northwest section) was reclaimed from the Passaic River with imported fill, which is described as a Loamy Sand or Sand Loam. Below the fill material, the next deeper layer that makes up the geology immediately under the Site is a silt loam, representing the former Passaic River sediment bed. Consistent with historical maps of shoreline development (Figure 1-3), this layer was not identified in borings on the northwest side of the Site, where less shoreline modifications occurred. (RI Report, p. 3-3)

Overall, with the exception of MW-118, which has been impacted by Building #10 operations (FS Report, Section 3.5.5), the shallow groundwater on the northern portion of the Site has not been as substantially impacted by lead contamination when compared to the southern portion of the Site. Table 3 (Exhibit 22 in EPA's Statement of Position), below summarizes the maximum total lead concentration detected in each shallow monitoring well (with non-detected total lead concentrations presented at the laboratory reporting limit of 1 ug/L) on the northern portion of the Site, excluding MW-118. There are five wells on the northern portion of the Site with maximum total lead concentrations greater than the remediation goal (RG) of 5 ug/L. Monitoring wells MW-117 and MW-120 were found to contain elevated total lead concentrations over three times greater than the RG of 5 ug/L. Lead contamination in these two wells is discussed below:

- Groundwater movement near MW-120 is affected by the groundwater mound or ridge centered on Lot 70, causing gradients to shift at MW-120 from east to north to west. In either case, soil/fill material from Lot 70 is located upgradient of MW-120. (Shallow groundwater gradients are based on the piezometric surface maps presented in RI Report, Figures 2-5 through 2-10 [Exhibit 10.B to EPA's Statement of Position]). According to the RI Report, page 1-8, the Federal Refining Company operated on Lot 70 since 1985, recycling precious metals. "The metal recovery process involved meltdown of scrap metal and recovery of metal using various acidic and caustic liquids." As part of actions taken pursuant to the NJDEP Site Remediation Program, soil/fill materials were excavated in 2012 and an asphalt cap was placed over the property in 2014. Post-excavation samples indicated elevated lead levels over 800 mg/kg remain under the asphalt cap, which were verified during the RI, and may be acting as a source of lead contamination to MW-120.
- Groundwater movement near MW-117 is also affected by the groundwater mound or ridge centered on Lot 70, bifurcating groundwater movement between MW-117 and MW-114. MW-117 is downgradient of multiple potential soil/fill material sources. The tidal communication with MW-114 is noted in the RI Report in Section 3.4.3 under the tidal evaluation.

Table 3: Maximum Total Lead Concentration in Monitoring Wells on Northern Portion of Site

Monitoring Well Number on the Northern Portion of the Site	Maximum Total Lead Concentration (ug/L) Reported for Three Sampling Events over 11- month Period
E-4	7.4
E-5	1.4
E-6	3.3
E-7	2.0
E-8	1.0
MW-114	1.0
MW-115	1.0
MW-116	2.0
MW-117	17.7
MW-119	7.9

MW-120	25.3
MW-121	4.2
MW-122	7.0
MW-124	1.0

In contrast, on the southern portion of the Site, a cluster of elevated total lead concentrations (in particular at MW-107, MW-108, and MW-110) was detected in the vicinity of Building #7, where lead-contaminated soil/fill material acts as a source material to shallow groundwater (Table 4, which is Exhibit 23 in EPA's Statement of Position). Some areas of the southern portion of the Site have shallow groundwater concentrations similar to the northern section, which is to be expected since not all areas of the Site were impacted similarly by Site operations, and lead-contaminated soils at levels greater than 800 mg/kg were not reported across the Site. However, based on the available soil and groundwater data, the lead contamination in the shallow groundwater is associated with the lead-contaminated soils in areas where the evidence indicates that lead was released by Site-related operations.

Table 4: Maximum Total Lead Concentration in Monitoring Wells on Southern Portion of Site

Monitoring Well Number on the Southern Portion of the Site	Maximum Total Lead Concentration (ug/L) Reported for Three Sampling Events over 11- month Period
E-1	1.3
E-2	3.7
E-3	2.1
MW-101	1.0
MW-102	12.8
MW-103	18.7
MW-104	10.4
MW-105	45.2 *
MW-106	26.5 (near Building #7)
MW-107	54.2 (near Building #7)
MW-108	109 (near Building #7)
MW-109	20.85 * (near Building #7)
MW-110	39.9 (near Building #7)
MW-111	14.6 (near Building #7)
MW-112	8.2
MW-123	1.2
* Average of field sample and duplicate	

Site groundwater data (all events) are plotted in two Pareto Charts, below. Figures 5 and 6, below (Exhibits 24 and 25, respectively, to EPA's Statement of Position) show the frequency and magnitude of lead detections in groundwater in descending magnitude (left to right), as well as their cumulative impact (orange line) plotted against the secondary (right) axis ranging from 0 percent when the first sample is examined and extending to 100 percent when the last sample is examined. For monitoring wells located on the northern portion of the Site, about half of the cumulative total lead detected in three rounds of sampling was in samples from MW-120 and MW-117, discussed above, with only 25 percent of all samples exceeding 5 ug/L of total lead, and the remaining 75 percent of samples below the total lead RG of 5 ug/L (*see also* Table 5). In contrast, in the southern portion of the Site, about half of the cumulative total lead detected in three rounds of sampling was in MW-105, MW-107, MW-108, and MW-110, with 56 percent of all samples exceeding the RG for total lead (*see also* Table 5; note that MW-107, MW-108, and MW-110 are located in the vicinity of Building #7). These charts demonstrate the significant differences between the northern and southern portions of the Site, such that developing broad site-wide conclusions using either the northern or southern portions is not appropriate. However, since groundwater total lead concentrations greater than the RG of 5 ug/L were reported on both the northern and southern portion of the Site, which are correlated to areas where lead was likely released as a result of Site operations, an active groundwater remedy is appropriate site-wide.

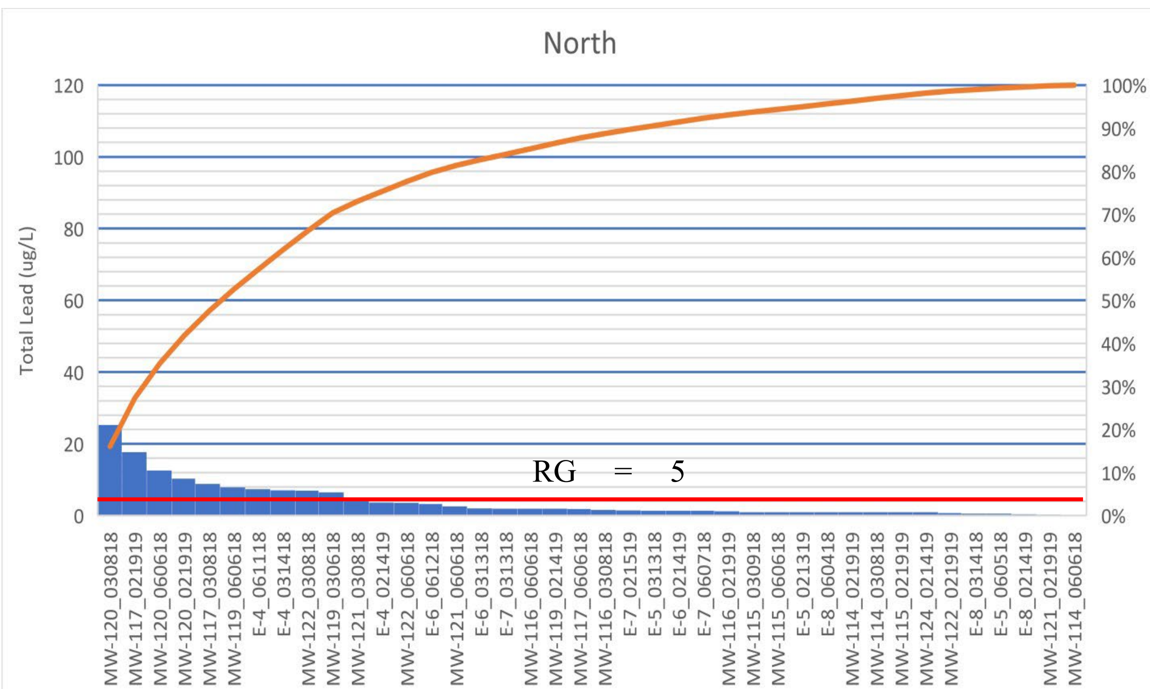

Figure 5: Pareto (frequency) Chart for Total Lead Concentrations in Monitoring Wells on the Northern Portion of Site

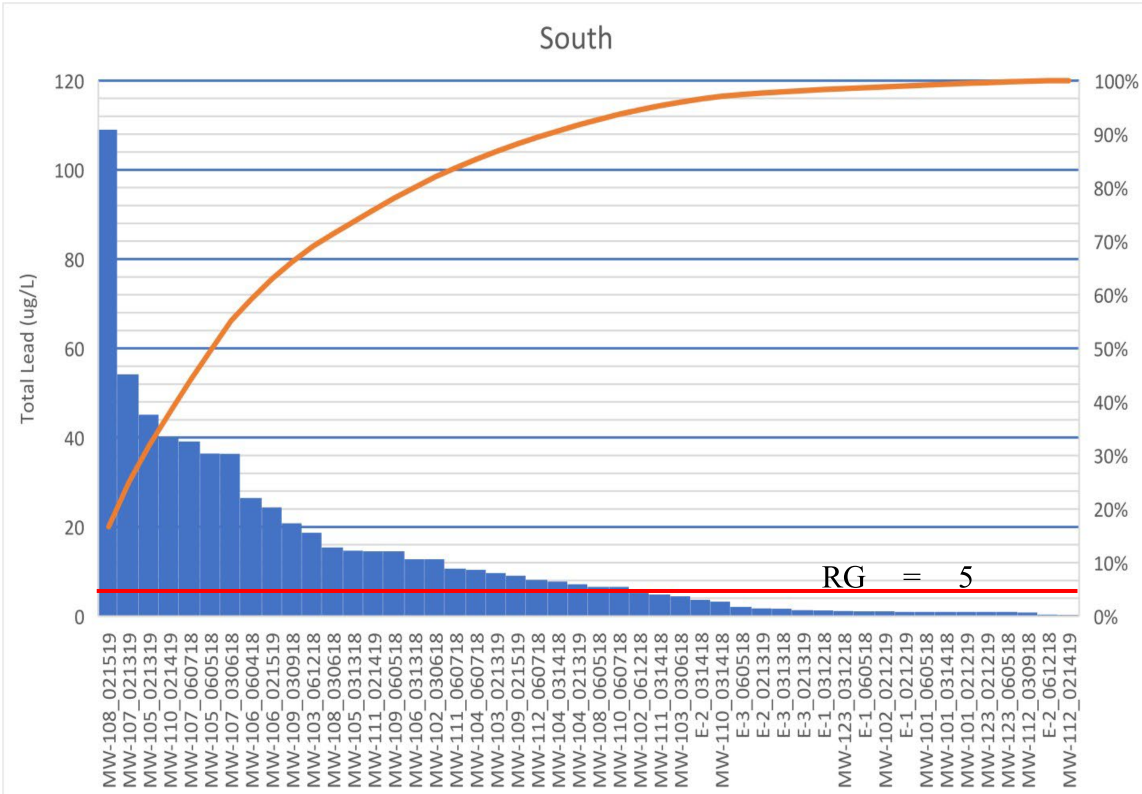

Figure 6: Pareto (frequency) Chart for Total Lead Concentrations in Monitoring Wells on the Southern Portion of Site

An alternate way of presenting the same data is to report the percentage of groundwater samples that exceed a specific concentration. As shown in the table below (Table 5, Exhibit 26 to EPA's Statement of Position), a groundwater sample on the southern portion of the Site was approximately two times more likely to exceed the RG (5 ug/L) for total lead than a groundwater sample from the northern portion, and a sample from the southern portion is eight times more likely to exceed 20 ug/L than a sample from the northern portion.

Table 5: Percent of Groundwater Samples Exceeding a Specific Concentration

Total Lead in Groundwater	Percent of Groundwater Samples Exceeding a Specific Concentration			
	>5 ug/L	>10 ug/L	>15 ug/L	>20 ug/L
Northern Portion of the Site	25%	10%	5%	2.5%
Southern Portion of the Site	56%	40%	25%	21%

In sum, based on the Region's analyses above, elevated groundwater lead concentrations are correlated to areas where lead was likely released as a result of Site operations. The data do not support the contention that, based on conditions in the northern portion of the Site, lead in shallow groundwater throughout the Site is attributable to historic fill material.

4. Comment: A commenter suggests that the movement of lead through the soil column is controlled by adsorption to soil, and the extent of adsorption is influenced by factors such as soil type, organic matter content and pH. The commenter believes Site conditions suggest lead would not migrate from soil to groundwater.

   Response: Once released into the environment, lead carbonate and other lead-based compounds documented as having been used at the Site would be available to mix with the surface soil/fill material and infiltrate into the subsurface and shallow groundwater during precipitation events, potentially causing "top-down" contamination wherever these compounds were released or otherwise present in the environment. This pathway is consistent with the soil-to-groundwater pathway in the RI Report's discussion of potential migration pathways (RI Report, page 5-2), which states that "Impacts from soils or potential site source areas would be expected to enter the unsaturated zone (shallow fill unit) and based on the nature of the release may reach groundwater which has an average depth of 5.1 feet bgs across the Site." The RI Report also states that "It should be noted that in complex mixtures such as groundwater, the effective solubility of individual compounds will differ significantly from the pure compound solubility." (RI Report, page 5-1). Depending on pH and ligand concentrations, lead-containing solids such as lead carbonate (cerussite, $PbCO_3$), hydrocerussite ($Pb_3(OH)_2(CO3)_2$), and anglesite ($PbSO_4$) may control the aqueous concentrations of lead in groundwater; the ultimate fate and transport of dissolved-phase lead will be dependent on the geochemistry of the aquifer over time. Dissolved lead could also adsorb to the surfaces of other solids in the soil/fill material and underlying aquifer, resulting in a source of lead from adsorption/desorption reactions. As presented in RI Report Figure 4-16, lead concentrations greater than 800 mg/kg are reported in surface and subsurface soil/fill material across the Site, with a cluster of comparatively elevated lead concentrations primarily detected in samples collected in the vicinity of Building #7. Elevated total lead concentrations in the shallow fill groundwater were also detected in samples from monitoring wells on Lots 63 and 64, and primarily within the vicinity of Building #7 (RI Report, April 2020, Figure 4-40). The soil/fill material with elevated lead concentrations (greater than 800 mg/kg) acts as a source material to the shallow groundwater in this area. Assuming 800 mg/kg for lead in the soils/fill, and a partitioning coefficient or log Kd values[6] ranging from 3.7 to 5, possible aqueous dissolved-phase lead concentrations are in the range from 8 to 150 ug/L. Total lead concentrations in groundwater were found to be greater than 5 ug/L across the Site and as high as 100 ug/L. This demonstrates that lead contamination in soil/fill, which was impacted by past operations, likely migrated to the shallow groundwater, recognizing that lead concentrations in the soil/fill were reported at levels much greater than 800 mg/kg.

[6] Kd value is a partitioning coefficient, which is the ratio of sorbed metal concentration (expressed in mg metal per kg sorbing material) to the dissolved metal concentration (expressed in mg metal per L of solution) at equilibrium.

5. Comment: A commenter criticized EPA's CSM by stating that the groundwater data do not follow the trend that would be expected if the source of lead in groundwater was actually historical spills and/or releases.

   Response: The RI field program for groundwater (excluding the temporary well point samples) consisted of three groundwater sampling events over an 11-month period. The data collected are insufficient to support trend analysis or to statistically evaluate groundwater variability over time. As stated in the RI Report (page 4-26) when discussing the shallow groundwater results: "The variations of results may be within reproducibly [sic] range of measurement or reflect Site conditions at time of sampling (seasonal variations, tides or recent precipitation events)." It would not be appropriate to include conclusions from a trend analysis or a statistical evaluation of groundwater variability over time, based on the three groundwater sampling events, in the CSM, due to the insufficient data.

6. Comment: A commenter questioned how EPA's CSM addressed a past release of lead-containing drinking water that was the result of a ruptured active water line which occurred during on-site work being conducted by EPA in 2012 that involved drilling test pits on Lot 64. The commenter reported that the City of Newark's 2012 Water Quality Report identified the 90th percentile concentrations of lead at 9 parts per billion (ppb) in the Pequannock System and 3.4 ppb in the North Jersey District Water Supply Commission (NJDWSC) system. The commenter concludes that this release is a source of lead to the groundwater and that EPA's CSM erroneously does not identify this source.

   Response: The data do not support the contention that the ruptured pipe was a significant source of lead at the Site. As the commenter indicates, in the City of Newark's 2012 Water Quality Report, the 90th percentile concentrations of lead are reported as 9.0 ppb in the Pequannock System and 3.4 ppb in the NJDWSC system. Using the Pequannock System's 90th percentile value reported in 2012 (9.0 ppb), it would have required a release of approximately 264,000 gallons of City of Newark drinking water to have contributed one gram of lead to the Site. The amount of water released was not documented, but this rupture was resolved in a few hours and sampling continued the next day. It is very unlikely that this single event made a significant contribution to lead contamination at the Site.

7. Comment: Commenters asked if CSMs had been developed for each of the impacted media presented in the Proposed Plan.

   Response: The CSM was developed for the Site and presents the potential sources of contamination, potentially affected media, potential transport mechanisms, and potential exposure pathways and receptors. The CSM is presented in Section 7.0 of the RI Report (April 2020). The selected remedy in the Record of Decision (ROD) addresses five media: waste material, sewer water, soil gas, soil/fill material, and groundwater.

D. Groundwater Remedy

1. Comment: A commenter believes that the groundwater remedy should not consider the aquifer as a drinking water aquifer. The commenter states that the presence of historic fill and the quality of the groundwater do not suggest that the aquifer would be used as a potable water supply. The commenter states that the presence of Classification Exception Areas (CEAs) at lots that have been remediated under the New Jersey Department of Environmental Protection's remediation programs suggests that the groundwater at the Site should not be considered as a potable water supply.

   Response: As stated in the RI Report (page 7-2), the groundwater at the Site is currently designated as a Class IIA aquifer by the State of New Jersey. N.J.A.C 7:9C has established groundwater quality standards for Class IIA aquifers, which are the groundwater ARARs. EPA acknowledges the existing CEAs that have been established on the Site by the State of New Jersey along with the existing deed notices and engineering controls, which are documented in the RI Report (page 7-2).

   The NCP Preamble states, "Ground water that is not currently a drinking water source but is potentially a drinking water source in the future would be protected to levels appropriate to its use as a drinking water source" (55 Fed. Reg. 8666, 8717 [March 8, 1990]). Consistent with the NCP, the groundwater remedy in the ROD is expected to restore the groundwater quality for Site-related contaminants of concern (COCs) to meet the standards applicable for a Class IIA aquifer.

2. Comment: A commenter stated that the pumping and treating of groundwater to prevent its migration to the Passaic River is not necessary because the RI did not prove that groundwater is migrating to the river.

   Response: The remedial investigation established that Site groundwater is migrating east toward the river. As stated in RI Report (page 3-4), "The Passaic River acts as a regional discharge point for groundwater in the Newark, New Jersey area." The RI Report (Section 3.4.1) states that the general flow pattern for the shallow and deep groundwater units is east towards the river. "The six groundwater potentiometric maps developed for the shallow fill unit (Figures 2-5 to 2-10) identify similar flow patterns across the Site showing groundwater flow is primarily to the east during both high and low tide" (RI Report, page 3-5). "Two groundwater contour maps developed for the native deep [groundwater] unit beneath the fill material also indicate flow to the east (Figures 2-12 and 2-13)" (RI Report, page 3-6). The groundwater component of the remedy selected in the ROD therefore includes a pump and treat system to provide hydraulic containment at the river's edge to minimize migration of contaminated groundwater to the river.

3. Comment: A commenter stated that the pumping and treating of groundwater will be ineffective towards meeting the remedial goals of the Site since the placement

of the wells will result in river water being pumped. Another commenter asked if a pilot study was conducted to confirm that a pump and treat system would contain impacted groundwater onsite. Another commenter asked whether the addition of a containment barrier such as a slurry wall or a reactive barrier wall would enhance the effectiveness of capturing groundwater to prevent any further impacts to the Passaic River.

Response: EPA acknowledges in the ROD (*see* ROD section "Description of Remedial Alternatives") that the pumping rate of the pump and treat system will need to vary to minimize extraction of river water. EPA anticipates that the groundwater level will be monitored, and the extraction rates will be variable, to provide maximum containment/capture without causing excessive induced infiltration from the river. A pilot study has not been completed and the number of extraction wells, pumping rate, and individual processes to be utilized for treatment will be determined during the remedial design. At this time, EPA does not expect that the addition of a containment barrier such as a slurry wall or a reactive barrier wall is needed to achieve groundwater RAOs.

4. Comment: A commenter stated that EPA's preferred groundwater alternative, Groundwater Alternative 4, will not achieve the Remedial Goals (RGs) due to the presence of historic fill as an ongoing source of contamination to groundwater. The commenter provided a modeling analysis of the performance of a pump and treat system that concluded it would take an extremely long time to achieve the RGs due to the presence of the fill as an ongoing source of lead to groundwater.

   Response: Groundwater Alternative 4, the selected remedy for groundwater in the ROD, includes institutional controls, targeted, periodic in-situ remediation, a pump and treat system, and groundwater monitoring. The commenter's calculations showing a "One-Dimensional Modeling Parameters" and a "Pumping Rates Assessment" appear to assume that pump and treat is the sole component to address the groundwater contamination. EPA acknowledges that a pump and treat system by itself (as proposed in Groundwater Alternative 2) would take longer to meet RGs than an alternative that also includes remediation of source materials, and consequently Alternative 2 was not ranked as high as Alternative 4 (*see* the evaluation of Groundwater Alternative 2 in Section 6.2.3.2 in the FS Report).

   The pump and treat system in the selected groundwater remedy will provide hydraulic containment at the river's edge to satisfy the groundwater remedial action objective (RAO) to "[p]revent or minimize discharge of groundwater containing COCs to surface water to minimize the potential for interaction between the Site and the Passaic River" (*see* Proposed Plan pp. 12 and 19. *See also* ROD sections "Remedial Action Objectives" and "Description of Remedial Alternatives"). The selected groundwater remedy also calls for periodic in-situ remediation which would be focused on the upgradient portion of the Site, targeting contaminated areas in both the shallow and deep groundwater. The commenter's analysis does not appear to consider the full breadth of the selected groundwater remedy. EPA acknowledges the ability to achieve RGs will also be challenged by the presence of COCs in the soil/fill, and by historic fill in some areas of the Site, albeit historic fill that was likely impacted by Site operations. Response actions undertaken for other media that include source control measures (i.e., UST removal and removal of elevated lead in the vicinity of Building #7) will remove potential groundwater sources, potentially allowing the selected remedy to achieve RAOs faster. Following source removal/control, groundwater data can be used to determine the effectiveness of the remedy and develop appropriate methods for monitoring impacts from historic fill, as distinguished from Site-related releases.

5. Comment: A commenter stated that EPA's preferred groundwater alternative is not the correct remediation alterative for this Site, and that the implementation of institutional controls, similar to those that have been selected at lots remediated under the NJDEP's Site Remediation Program, is the appropriate remedy.

   Response: A groundwater alternative with solely institutional controls (and no active remedial action) is not a feasible CERCLA alternative because it will not satisfy the threshold criteria of overall protection of human health and the environment and compliance with ARARs. As provided in the NCP:

   > The use of institutional controls shall not substitute for active response measures (e.g., treatment and/or containment of source material, restoration of ground waters to their beneficial uses) as the sole remedy unless such active measures are determined not to be practicable, based on the balancing of trade-offs among alternatives that is conducted during the selection of remedy. 40 CFR 300.430(a)(1)(iii)(D).

   See also "Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites" (EPA, December 2012).

6. Comment: A commenter noted that EPA's preferred groundwater alternative does not match groundwater areas with preliminary remediation goal (PRG) exceedance as shown in Figure 5 of the Proposed Plan.

   Response: EPA updated the corresponding groundwater figure in the ROD (Figure 16) but notes that the figures presented in the Proposed Plan and ROD are conceptual, schematic diagrams to provide an overview of the selected remedy; they do not represent remedial design drawings.

7. Comment: A commenter criticized EPA for selecting a preferred groundwater alternative, arguing that the groundwater remedy selection should be deferred to a later time after the sources of contamination to groundwater have been remediated.

Response: EPA disagrees with the suggestion that EPA defer selection of a groundwater remedy. EPA has documented in the RI that the nature and extent of groundwater contamination and the fate and transport of contaminants associated with groundwater are understood. Exposure to the groundwater contamination poses an unacceptable risk to human health, and EPA therefore has selected a remedy for groundwater in this ROD. EPA acknowledges that the ability to achieve the groundwater RGs may be challenged by the migration of COCs in the soil/fill to the groundwater. The selected remedy for soil/fill therefore includes source control measures (i.e., UST removal and removal of elevated lead in the vicinity of Building #7) that would remove potential sources of groundwater contamination and are expected to allow the remedy to achieve RAOs faster.

8. Comment: A commenter stated that EPA disregarded Site conditions and Site data critical to properly conduct the comparative analysis of the groundwater alternatives, specifically that historic fill is the primary source for lead contamination, and concludes that selection of the groundwater remedy should be deferred.

   Response: As stated in response to the previous comment, EPA disagrees with the suggestion that EPA defer selection of a groundwater remedy. The commenter's assessment of the groundwater comparative analysis primarily hinges on its position that lead is not a Site-related contaminant and instead is primarily associated with historic fill. However, as discussed in the previous responses to comments (*see* Section C of this Responsiveness Summary), EPA's CSM, which takes into account historic information and Site data, supports EPA's conclusion that lead in groundwater is Site-related. The FS and Proposed Plan appropriately compared a set of groundwater alternatives that addressed Site-related contaminants, including lead from Site-related releases, and that would achieve the groundwater RAOs.

9. Comment: A commenter argues that the detections of certain contaminants at the Site do not justify their inclusion in the preferred groundwater alternative. The commenter noted for many of the contaminants that the concentrations varied during the remedial investigation and that some results for a particular contaminant were below the RG. The commenter also criticized EPA for not acknowledging the potential for off-site sources to impact on-site shallow and deep groundwater.

   Response: Unacceptable risk was identified based on exposure to groundwater, and therefore RAOs and remedial alternatives were developed to achieve RGs for Site-related COCs. The ROD includes RGs for all Site-related COCs that were identified during the RI. The remedial design will include a pre-design investigation to characterize groundwater conditions at that time so that the design can be developed to focus on the relevant chemicals.

   The RI acknowledges impacts of off-site sources on the Site. As stated in the RI Report (page 7-3) under identification of sources in the conceptual site model, "Off-site groundwater flow emanating from adjacent upgradient sites, or intrusion from the river to the Site due to tidal or high river levels, may also be a potential source of groundwater impacts. Additionally, minor releases may have collectively contributed to widespread low-level impacts across the Site." The RI Report (page 7-7) also states in the conceptual site model under potential Pathways from Off-Site Contaminant Sources that "There are numerous off-site facilities in the area that are reported contaminated sites. There is a groundwater CEA beneath the Site from an upgradient release(s) on the adjacent property. These off-site sources may impact on-site groundwater quality." EPA considered the off-site sources when it determined the RAOs for the Site, and developed the groundwater alternatives to address contaminants from on-site releases.

E. Soil/Fill Remedy

1. Comment: Commenters asked which buildings would be demolished and which would be preserved, as part of the remedy for the soil/fill. The derelict state of some of the buildings is a concern.

   Response: The ROD does not include demolition of existing buildings as they are not considered sources of contamination that could be released to the environment, nor is it necessary to remove existing buildings to implement the remedy. Existing building floor slabs in contact with soil/fill are incorporated into the site-wide cap. If a building is demolished in the future and its floor slab removed, additional cap construction would be warranted at that location.

2. Comment: Commenters asked for more information on the proposed cap thickness, and they stated that the preferred soil alternative would leave impacted soils in place, while future utility work would potentially result in dermal contact of these soils by the utility workers. The commenters also asked if EPA plans to utilize a demarcation barrier to mitigate these potential risks, which would require the removal and disposal of impacted soils in order to allow for the installation of a clean barrier/buffer layer to conform with the presumptive remedies in the NJDEP Technical Requirements for Site Remediation (N.J.A.C. 7:26E).

   Response: EPA's selected remedy for soil/fill material includes capping, which consists of the construction of a barrier over/around the contaminated areas. The site-wide cap is intended to prevent access to and contact with the contaminated media and/or to control its migration and will be consistent with the New Jersey Technical Requirements for Site Remediation. The cap would likely consist of a 6-inch asphalt cap (bituminous concrete) constructed over a 6-inch gravel subbase that would be placed on top of the existing surface. Where new cover material is required, the new pavement is assumed to be asphalt, but concrete would be acceptable as it provides the same protection of human health and environment as asphalt. Some existing pavement may be incorporated into the cap, though may need to be repaired to meet the criteria for an engineering control and the pavement would have to otherwise meets the specifications of the cap design. The use of existing pavement as a component of the cap would reduce the amount of material resources required, as encouraged under EPA Region 2 Clean & Green Policy. Using existing asphalt or concrete pavement reduces the environmental footprint of the remedial action. Deed notices will acknowledge the cap as an engineering control to prevent access to underlying contaminated soils. Any future disturbance to the cap would need to be coordinated with EPA. The remedial design for the Site will address these details.

3. Comment: A commenter asked for the volume of soil that would be excavated as part of the preferred soil alternative.

   Response: The preferred soil/fill alternative includes a focused excavation of lead-contaminated soil at concentrations greater than 800 mg/kg around Building #7 on Lots 63/64, above the water table. Based on available data, the footprint of this excavation assumed for cost estimating purposes is approximately 0.5 acre and approximately 5,000 cubic yards of soil (FS Report, Section 5.2.4, page 5-6 and Appendix B). These dimensions will be confirmed in the remedial design.

4. Comment: A commenter stated that the removal and off-site disposal and management of contaminated soils or source material is the most protective soil alternative, and that this should be to a location far enough away so that no one is affected by it.

   Response: As presented in the Proposed Plan, EPA evaluated removal and off-site disposal and management of waste and soil/fill material. The selected remedy for wastes identified at the Site, including free product [light non-aqueous phase liquid (LNAPL)] and water present in underground storage tanks and buildings, is removal and proper disposal at an off-site waste disposal facility. The remedy for soil/fill includes bulkhead replacement, capping of the entire Site, additional excavation and off-site disposal of NAPL-impacted soils on Lot 63, and a focused excavation and off-site disposal of lead-contaminated soil/fill above the RG in the vicinity of Building #7. The remedy will also reduce mobility of other contaminants of concern (COCs) in the soil/fill material that are co-located with lead in the vicinity of Building #7. Excavated soil/fill material will be tested, disposed, and managed at an appropriate off-site disposal facility (*see* ROD section "Description of Remedial Alternatives"). Excavated soil/fill material may contain elevated lead concentrations that may classify it as a Resource Conservation and Recovery Act (RCRA) characteristic waste (Waste Code D-008). Off-site disposal may therefore need to comply with RCRA land disposal restriction (LDR) requirements via treatment to eliminate the RCRA characteristic, or alternative LDR treatment standards under 40 CFR 268.49 (Phase IV LDR). A detailed comparison of the soil alternatives that considered excavation and off-site disposal can be found in Chapter 5 of the FS Report (July 2020).

5. Comment: A commenter criticized EPA for including bulkhead repair/replacement in the preferred soil/fill alternative, stating that the source of lead contamination in

the soil is from the historic fill and not from a CERCLA release to the soil and that the bulkhead therefore does not address releases of Site-related contamination. The commenter also stated that the replacement of the bulkhead does not meet any ARARs for the Site.

Response: One of the RAOs for soil/fill material is to "Prevent or minimize off-site transport of soil containing COCs to minimize the potential for interaction between the Site and the Passaic River" (*see* ROD section "Remedial Action objectives"). As discussed in the response to comment C.1. (Conceptual Site Model), both the Site data and evidence about historical Site operations support EPA's determination that former lead paint manufacturing operations at the Site contributed the predominant source of lead contamination to the soil and groundwater. Furthermore, other COCs also are from sources other than historic fill, including but not limited to benzene, toluene, ethylbenzene, and xylenes that are likely the result of releases from USTs on Lots 63 and 64 or illegal dumping (*see* ROD section "Summary of Site Characteristics").

The replacement and/or repair of the bulkhead in the soil/fill remedy satisfies the RAO by providing vertical containment of the impacted soils on-site for all COCs in the soil/fill material. As stated in the ROD, "The bulkhead will be reinforced or reconstructed, as appropriate, in order to minimize the potential for interaction between the Site and surface water, minimize soil erosion, and prevent off-site transport of soil/fill containing COCs and Contaminants of Potential Ecological Concern (COPECs)." The replacement and/or repair of the bulkhead satisfies location-specific and action-specific ARARs to meet health and safety requirements and to comply with applicable provisions of regulations and permits, including erosion and sedimentation regulations and storm water management.

6. Comment: A commenter stated that EPA disregarded Site conditions and Site data that are critical to properly conducting the comparative analysis of the soil/fill alternatives, arguing that historic fill is the primary source for lead contamination and that the bulkhead enhancement in particular does not address contaminants attributable to releases or help achieve any of the NCP's balancing criteria.

   Response: The commenter's assessment of the soil/fill comparative analysis primarily hinges on its position that lead is not a Site-related contaminant and is primarily associated with historic fill. As discussed in previous responses to comments (*see* Section C of this Responsiveness Summary), EPA's CSM, which takes into account historic information and Site data, supports EPA's conclusion that lead in soil/fill is Site-related.

   The selected remedy for soil/fill (Alternative 4) includes institutional controls, engineering controls for containment (cap and bulkhead), and NAPL excavation and removal, and a focused excavation and off-site disposal for lead contaminated soil/fill above the RG in the vicinity of Building #7. The commenter's assessment of the comparative analysis focuses primarily on one element of the alternative, the bulkhead. The bulkhead (which provides vertical containment) in combination with the engineered cap (which provides horizontal containment) limits mobility of soil/fill COCs and provides long-term effectiveness of the remedy to meet the soil/fill RAO to "[p]revent or minimize off-site transport of soil containing COCs to minimize the potential for interaction between the Site and the Passaic River."

Vertical containment of soil contaminated with COCs will still be necessary because the targeted excavation component of the soil/fill remedy is not intended to remove all COCs in soil at the Site that could potentially migrate to the river. The commenter therefore is incorrect that vertical containment provided by the bulkhead will not be necessary to protect human health or the environment, or contribute to the remedy's long-term effectiveness and permanence, after the excavation is completed. The commenter also states that the bulkhead does not contribute to ARAR compliance or reduction of toxicity, mobility or volume ("TMV") through treatment, but whether the bulkhead itself contributes to ARAR compliance or reduction of TMV through treatment does not preclude its inclusion as an element of the soil/fill remedy. EPA agrees that the bulkhead by itself does not reduce TMV through treatment but the bulkhead does meet location-specific and action-specific ARARs to meet health and safety requirements and to comply with applicable provisions of regulations and permits, including erosion and sedimentation regulations and storm water management. When considering all elements of the selected soil/fill remedy, EPA concluded in the ROD that this component would reduce mobility of COCs, through excavation, removal and off-site disposal of elevated lead around Building #7. The toxicity and volume may be reduced if material is treated to comply with the requirements of the disposal facility.

With regard to short-term effectiveness, the commenter states that "it is unnecessary to incur the risks and disruptions associated with installation of the replacement bulkhead" and that "removal of soil/fill can occur more quickly than bulkhead enhancement." EPA assessed the short-term impacts of the Alternative 4 for Soil/Fill in accordance with the NCP (40 CFR 300.430(e)(9)(iii)(E)) and did not identify any short-term impacts from the bulkhead component that significantly weigh against its inclusion in the selected remedy. The speed at which soil/fill can be removed is not relevant to whether the bulkhead enhancement is effective in the short-term. EPA will continue to provide outreach to the community and local businesses on the remedial action and construction schedule so that business activity can continue during construction.

The commenter further argues that the administrative and technical challenges with bulkhead enhancement raise questions as to whether it is implementable. EPA determined in the ROD that the selected remedy for soil/fill is implementable and will assist with coordination between the United States Army Corps of Engineers (USACE) and NJDEP on construction of the bulkhead.

The commenter also believes that Soil/Fill Alternative 4 is not cost effective because "the bulkhead adds millions of dollars" the cost of that alternative "without remediating any contaminants actionable under CERCLA." As discussed previously, EPA disagrees that the lead in soil at the Site is attributable only to historic fill. The bulkhead will provide vertical containment of lead and other COCs that resulted from Site-related releases that are property addressed by the CERCLA remedy for the Site. We also note that the comment does not accurately characterize the cost criterion for remedy selection under the NCP's balancing criteria for evaluating remedial alternatives. The "cost" criterion evaluates and compares the cost of the respective alternatives, including capital costs, annual operation and maintenance costs, and the net present value of capital and O&M costs, but draws no conclusion as to the cost-effectiveness of the alternatives (*see* 40 CFR § 300.430(e)(9)(iii)(G) and 55 F.R. 8666, 8722 [March 8, 1990]). Cost-effectiveness is a requirement for remedy selection under CERCLA Section 121(b) and considers whether the overall effectiveness of a remedy is proportional to its costs (40 C.F.R. § 300.430(f)(1)(ii)(E)). EPA determined in the ROD that the soil/fill remedy is cost-effective.

EPA properly evaluated the soil/fill alternatives, as a whole, in the comparative analysis as required by the NCP.

7. Comment: A commenter questioned whether the repair/replacement of the bulkhead would interfere with the navigable portion of the river, as the river is currently used by rowers and other recreators.

   Response: Since replacement and repair of the bulkhead will likely involve in-river operations, temporary limitations or restrictions on the navigable portion of the waterway may occur, but no significant permanent impact to the navigable portion of the river is anticipated.

F. Waste Remedy

1. Comment: Commenters stated that in order for institutional and engineering controls to be effective for remediating the groundwater, any free or residual product, including the non-aqueous phase liquid (NAPL), would need to be identified and remediated, and any wastes that could pose a risk to further impacting on-site or off-site media would have to be removed for off-site disposal.

   Response: The selected remedy for wastes identified at the Site, including free product [light non-aqueous phase liquid (LNAPL)] and water present in underground storage tanks and buildings, is the removal and proper disposal at an off-site waste disposal facility. In addition, the selected soil/fill remedy will address NAPL impacted soils on Lot 63, which will be excavated and disposed of off-site. Disposal facility options, their disposal requirements, and locations will be evaluated as part of the remedial design. Removal and off-site disposal of the LNAPL and impacted soil will address a potential mobile source material to the groundwater. Underground tank removal would follow the substantive requirements of the New Jersey tank closure regulations and Technical Requirements for Site Remediation (N.J.A.C. 7:26E-5.1(e)).

2. Comment: A commenter stated that the Proposed Plan mischaracterized wastes. The commenter stated that the Proposed Plan references light non-aqueous phase liquid (LNAPL) in Lot 64 underground storage tanks (plural), but the RI and FS only identified LNAPL in one underground storage tank. The commenter also stated that the Proposed Plan includes a statement that the RI identified an aqueous solution on Lot 64 and that this aqueous solution on Lot 64 will be addressed by the remedy, while the RI did not identify an aqueous solution on Lot 64, and the FS does not discuss any aqueous waste on Lot 64 as part of any remedy.

   Response: EPA acknowledges the error identified by the commenter. EPA corrected the error and changed "tanks" to "tank" in the ROD.

   Regarding the issue of aqueous waste on Lot 64, EPA's selected remedy for waste removal includes removal of six underground storage tanks on Lot 64 and the disposal of the tank contents, including aqueous and solid waste and/or LNAPL. On-site waste will be containerized and transported to an off-site facility for disposal. This aqueous solution in the tanks was sampled during the RI (page 4-2).

G. Sewer Remedy

1. Comment: A commenter indicated that the City of Newark is currently performing an assessment of its long-term control process and permitting with the State of New Jersey, and this effort, which is in the final stages, is expected to announce alternatives for improvements to the long-term control plan soon. The commenter identified the presence of the sewers located along Route 21 and asked if EPA is reviewing the long-term control plans with regard to these sewers and the preferred alternative for the Site. The commenter asked if the remedial action for sewers would comply with the City of Newark's permits.

   Response: The Proposed Plan for the Site identified an inactive sewer line on Lot 1 with a manhole that contained contaminated sewer water and associated solids. The sewer is inactive based on observations of no flow and because there was no current user upstream of the manhole. The selected remedy includes removal of the sewer water and associated solids, off-site treatment and disposal and proper closure of the line. Other portions of the sewer system on the Site were investigated and no other portions of the sewer system were identified as a potential source of contamination to the groundwater or soil/fill material (Proposed Plan, pages 5 and 14). Since this sewer line is inactive, remediation and closure of the line would not affect the City of Newark's long-term control plans with regard to its combined sewer system.

If, during the remedial design, it is determined that utility lines need to be added, moved, or augmented on-site, these designs would comply with substantive requirements of permits, but no permits would be obtained, in accordance with the permit exemption at CERCLA Section 121(e)(1).

H. Risk Assessment

1. Comment: Commenters asked if there are impacts from the Site to environmentally sensitive natural resources, such as the Passaic River. The commenters added that EPA had previously indicated that any impacts to the Passaic River would be addressed by the remediation planned for that site and were curious if this was still correct. The commenters also asked what ecological studies had been performed for the Riverside Industrial Park Superfund site.

   Response: The Screening Level Ecological Risk Assessment (SLERA, dated April 2020) for the Site was focused on the potential for terrestrial wildlife exposure from on-site surface soil/fill material. The habitat present on the Site is fragmented and of low value to wildlife with opportunistic, invasive, and transient species being the dominant species observed or expected to be on the Site (*see* the Proposed Plan, pages 10-11). In a presentation to the Passaic River Community Advisory Group (CAG), EPA explained that sediments and surface water in the Lower Passaic River were evaluated as part of the remedial investigation for the lower 8.3 miles of the river, which is Operable Unit 2 (OU2) of the Diamond Alkali Superfund Site, and unacceptable ecological risk was identified for ecological receptors that are exposed to the sediment and surface water. The river adjacent to the Site is to be addressed through the EPA remedial action for the lower 8.3 miles (Diamond Alkali Superfund Site OU2) and was not included in the SLERA for this Site.

I. Air Emissions

1. Comment: Several commenters asked how air emissions will be controlled during remediation of the Site, particularly since this area has many environmental justice concerns associated with lower income communities and communities of color. The commenters requested that EPA provide the public with a written plan that details how the EPA will control air emissions during the remediation.

   Response: EPA is aware that air quality and environmental justice are community concerns. Both of these topics were discussed with the community during the 2020 community interviews (CIP, pp. 17 and 25). During the remedial design for the Site, construction activities will be reviewed and designed to mitigate air emissions, including dust and odor, and other impacts to air quality. The party performing the remedy will also develop a Community Health and Safety Plan, which EPA will review and approve. This plan will describe the air monitoring that will occur during construction and any corrective actions that would be undertaken if air quality standards are exceeded due to Site-related construction.

2. Comment: Several commenters expressed concern that air emissions from the nearby Diamond Alkali Superfund site may travel quite a distance to their homes.

   Response: EPA understands this to be a reference to the lower 8.3 miles of the Lower Passaic River, OU2 of the Diamond Alkali Superfund site, which is a different site from the subject of this Responsiveness Summary. EPA selected a remedy for the lower 8.3 miles in 2016. As part of implementing the remedy for the lower 8.3 miles, EPA anticipates that a Community Health and Safety Plan will be developed, which EPA will review and approve. Information about the Diamond Alkali site can be found in the site profile page: www.epa.gov/superfund/diamond-alkali.

J. Future Use

1. Comment: Commenters expressed their agreement with EPA's determination that the reasonably anticipated future land use would remain commercial/industrial, stating that it would be difficult and expensive to remediate the Site for residential use, and citing the potential exposure for residents.

   Response: EPA acknowledges comment on the reasonable anticipated future land use.

2. Comment: Commenters stated that the preferred remedial alternatives identified by EPA should be implemented in conjunction with a revitalization/redevelopment plan that focuses on many environmental justice concerns, including green infrastructure, spaces for agricultural production to support low-income families, education, administration, and housing.

   Response: Under Superfund law, EPA's goal is to reduce risks to human health and the environment from exposure to hazardous substances identified as COCs to target ranges defined in the law and EPA guidance documents. While the remedy selection process does not give EPA the authority to develop revitalization/redevelopment plans, depending on site-specific circumstances, it is sometimes possible for aspects of development to be incorporated into a remedy. At present, however, EPA is not aware of any detailed plans for development. EPA considers the reasonably anticipated future land use when selecting remedies, based on factors including historical use, current use, surrounding land use, zoning, and town master plans. For the Site, a Reuse Assessment Plan (Appendix O of the RI Report) was developed to evaluate reasonable future land use at the Site. Currently, the Site is located within a "dedicated industrial" zone in the City of Newark. While the City of Newark may rezone the Site for redevelopment following EPA's remedial action, EPA concluded for purposes of remedy selection that the future use of the Site could reasonably be anticipated to remain commercial/industrial. This conclusion is supported by the City of Newark's 2013 Public Access and Redevelopment Plan for the North Ward. According to this plan, community gardens and community centers are not permitted in a "dedicated industrial" zone.

(Data Source: City of Newark, 2013, "Newark's River: Public Access and Redevelopment Plan." Submitted to the Central Planning Board and Municipal Council by the Newark Planning Office, Department of Economic & Housing Development. April 2013).

Consistent with EPA Region 2's Clean and Green policy, EPA will evaluate the use of sustainable technologies and practices with respect to implementation of the selected remedy components.

3. Comment: Several commenters identified the issue of homeless occupancy and security concerns at the Site, and asked about EPA's plan to address these issues, including cameras, security patrols or engineering controls, and/or provide social services for the homeless at the Site.

   Response: EPA acknowledged in the Proposed Plan that pedestrian trespassing occurs through unsecured portions of the Site, and potential risks to adolescent and adult trespassers were evaluated in the Baseline Human Health Risk Assessment (Proposed Plan, page 8). One of the RAOs for the Site is to "remove COCs or minimize COC concentrations and eliminate human exposure pathways to COCs in soil and fill material." Institutional controls in combination with other active remedial alternatives can achieve this RAO. All of the proposed soil/fill alternatives (except No Action) included institutional controls, including land use restrictions and barriers to restrict access. As stated in the ROD's description of the Selected Remedy for Soil/Fill, "Fencing will be required to be maintained and enhanced as appropriate to limit unauthorized access to the Site and use of the Site in a manner inconsistent with the remedy." The final combination of institutional controls and barriers to restrict access will be determined in the remedial design. EPA has also communicated with the City of Newark regarding patrolling vacant properties, installing fences, and securing abandoned buildings. The Superfund law does not provide EPA with the ability to provide social services.

4. Comment: Several commenters expressed their interest in river access from the Site, once the Site is remediated, suggesting options such as a riverwalk, boat ramp, and floating docks. Commenters stated that these types of developments would be beneficial to the community.

   Response: As noted above, under Superfund law, EPA's goal is to reduce risks to human health and the environment from exposure to hazardous substances identified as COCs to target ranges defined in the law and EPA guidance documents. EPA does not have the authority to require public walkways, boat ramps, or floating docks as part of the remedy. EPA's experience at other Superfund sites is that, after remediation, a cleaner site often encourages local municipalities and private entities to develop more public access to and from water bodies for recreational purposes.

5. Comment: A commenter asked about ways in which Newark residents can be trained to participate in some of these cleanup activities for job opportunities.

   Response: EPA is aware of job opportunities that have been created during construction and remediation at other Superfund sites (Hudson River PCBs site remedial action, Phase 1 of the 2008 removal action in the Lower Passaic River, at the Diamond Alkali site). EPA is committed to encouraging the use of a variety of programs that train local community members in skills that could be utilized during the construction and remedial action at the Site. One such program is the Superfund Job Training Initiative, which is discussed in the Site's Community Involvement Plan, and EPA will encourage the party or parties performing the remedial action to consider using it.

K. Implementation

1. Comment: A commenter asked who will be designing and implementing the remedy. Another commenter expressed concern that EPA may not be able to fund the remedy, thereby resulting in a dangerous condition at the Site where contaminated materials are exposed and the remediation cannot be completed.

   Response: It is EPA's policy to have Superfund cleanups performed by the parties legally responsible for the contamination, consistent with EPA's September 20, 2002 memorandum "Enforcement First for Remedial Action at Superfund Sites".[7] EPA will therefore seek to have the potentially responsible parties for the Site design and perform the cleanup, under EPA oversight.

2. Comment: A commenter asked for information about how remedial design and remedial action work will be bid and contracted for the cleanup.

   Response: As stated previously, EPA will look to the parties legally responsible for the contamination to fund the design and remedial work at the Site. If those parties perform the work, they would select contractors for the work.

L. Dispute

1. Comment: A commenter stated that EPA's Director of the Superfund and Emergency Management Division, who issued the dispute decision, failed to acknowledge the relevant Site data presented during dispute resolution.

   Response: This is not a comment on the Proposed Plan or its supporting information and is beyond the scope of the Responsiveness Summary.

M. Site History

[7] https://www.epa.gov/sites/default/files/documents/enffirst-mem.pdf

1. Comment: A commenter submitted a thesis that contained detailed information on the Site history, including the period during which the facility operated as the home of several boat clubs.

   Response: EPA acknowledges the submission of information related to the history of the Site.

N. Public Comment Period

1. Comment: Several commenters requested that EPA extend the public comment period beyond the originally announced date of August 21, 2020 to allow for a thorough review of the Proposed Plan and EPA's preferred alternative.

   Response: EPA provided an initial 30-day public comment period from July 22, 2020 to August 21, 2020, after which EPA granted several extensions, and the public comment period ended on February 19, 2021.